

PT100MF1MP

Phototransistor

Compact, Surface Mount Type Phototransistor

Features

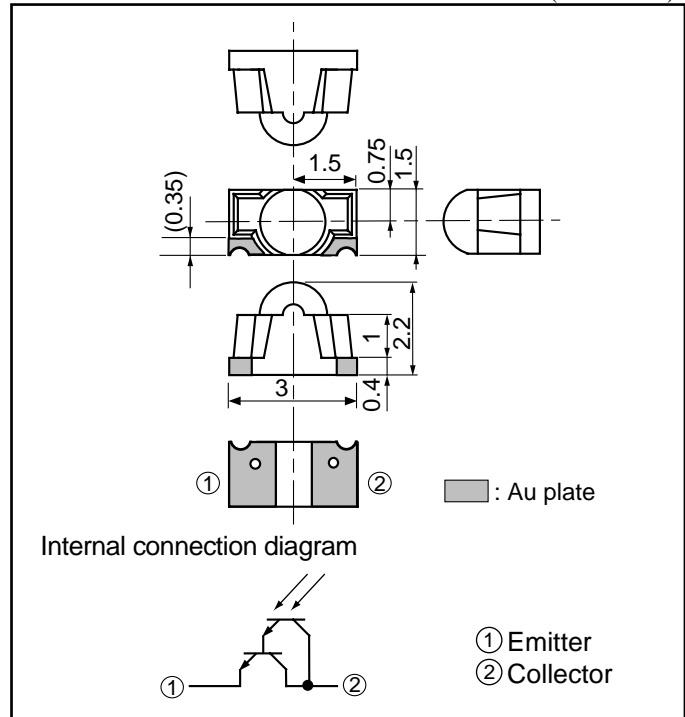
- (1) Compact, thin type(3.0 × 1.5 × 2.2mm)
- (2) Darlington phototransistor output
- (3) Surface mount type
- (4) 2-way mounting; top view/side view
- (5) Reflow soldering
- (6) Visible light cut-off resin
- (7) Taped model (side view:2 000 pcs./1 reel)
(top view:1 500 pcs./1 reel)

Applications

- (1) Mobile phone
- (2) Portable game machine
- (3) Amusement machine

Outline Dimensions

(Unit : mm)



Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Collector-emitter voltage	V_{CEO}	35	V
Emitter-collector voltage	V_{CEO}	6	V
Collector current	I_C	20	mA
Collector power dissipation	P_C	75	mW
Operating temperature	T_{opr}	-30 to +85	°C
Storage temperature	T_{stg}	-40 to +95	°C
*1 Soldering temperature	T_{sol}	240	°C

*1 For MAX. 10 s

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(Internet)

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■ Electro-optical Characteristics

(Ta=25°C)

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Conditions
Collector current	Ic	0.2	-	1.2	mA	*2 Ee=0.01 mW/cm ² , VCE=5 V
Dark current	ICEO	-	-	1.0	μA	Ee=0, VCE=10V
Collector-emitter saturation voltage	VCE(sat)	-	-	1.0	V	Ee=1 mW/cm ² , IC=0.8 mA
Collector-emitter Breakdown voltage	BVCEO	35	-	-	V	IC=0.1 mA, Ee=0
Emitter-collector Breakdown voltage	BVECO	6	-	-	V	IE=0.01 mA, Ee=0
Peak sensitivity wavelength	λp	-	860	-	nm	-
Response time(Rise time)	tr	-	400	2 000	μs	VCE=2 V, IC=5 mA RL=100 Ω
Response time(Fall time)	tf	-	300	1 500	μs	
Half sensitivity angle	Δθ	-	±15°	-	-	-

*2 Ee : Irradiance by CIE standard light source A (tungsten lamp)

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